CLAIMS

What is claimed is:

1. A granulated fertilizer whose components are iron, zinc, manganese, copper, molybdenum, sulphur and clay, wherein its concentrations are iron from 11% to 13%, zinc from 3% to 9%, manganese from 0.1% to 2.5%, copper from 0.5% to 0.7%, molybdenum from 0% to 0.1%, sulphur from 7% to 10%, and from 45% to 57% of clays, giving as a result a pellet with a size of 1.5 to 4.5 millimeters, using a bonding agent. All percentages in weight are based on the total weight of the fertilizer.

2. A granulated fertilizer according to claim 1, characterized in that iron is monohydrated iron sulphate or heptahidrated iron sulphate.

3. A granulated fertilizer according to claim 1, characterized in that zinc is monohydrated zinc sulphate.

4. A granulated fertilizer according to claim 1, characterized in that manganese is monohydrated manganese sulphate.

5. A granulated fertilizer according to claim 1, characterized in that copper is heptahidrated copper sulphate.

6. A granulated fertilizer according to claim 1, characterized in that molybdenum is tetrahidrated ammonium molybdate.

7. A granulated fertilizer according to claim 1, characterized in that clay is a caolinite, ilinite or montmorillonite or a mixture of any of the above in any proportion.

8. A granulated fertilizer according to claim 7, characterized in that the mixture of clays contains from 0 to 15% iron, based on the total weight of the mixture of clays.

9. A granulated fertilizer according to claim 1, characterized in that the bonding agent is calcium oxide in a concentration of 0.05 to 0.3%, based on the total weight of the fertilizer.

10. A granulated fertilizer according to claim 1, characterized in that the pellet is 100% soluble in a period of approximately 30 minutes at a temperature of 25°C.

11. A granulated fertilizer according to claim 1, characterized in that the granulated fertilizer has a pH of 3.5 to 5.

12. A granulated fertilizer according to claim 1, characterized in that the granulated fertilizer has a moisture of 2 to 6%.

13. A granulated fertilizer according to claim 1, characterized in that the granulated fertilizer has a hardness of 1.9 to 2.3 Kg/cm2.

14. A method for preparing a fertilizer like the one quoted in claim 1.

Mix the iron sulphate, zinc sulphate, copper sulphate, manganese sulphate, ammonium molybdate and pulverized montmorillonite, ilite or caolinite clay until a homogeneous mixture of dusts is obtained which will be fed onto a pelletizing plate where a mixture of water and calcium oxide will be added, as a bonding agent, by means of a sprinkler. The mixture of dusts will remain on the pelletizing plate enough time to obtain pellets. The pellets will then be fed into a drying oven where they will lose moisture and will later be sifted.

SUMMARY

The invention consists of a granulated fertilizer which contains iron (11 to 13%), zinc (3 to 9%), manganese (0.1 to 2.5%), copper (0.5 to 0.7%), in the form of sulphates, also ammonium molybdate (0 to 0.1%) and a Caolinite, Ilite or Montmorillonite clay (45 to 57%), or a mixture of them in any proportion. All the percentages by weight are based on the total weight of the fertilizer. The product is 100% soluble, the high cationic exchange capacity which clays have allows the micronutrients to be adsorbed by the clay and prevent its leaching or reacting, making its assimilation by the plant more efficient and better. The use of sulphates in the soil, in the presence of water provoks an acidification of the soil which allows a better assimilation of the micronutrients in alkaline soils.